



Industrial & Entrepreneurial Engineering Program Agreement

Western Michigan University

Bachelor of Science in Engineering, (B.S.E.)

Kalamazoo Valley Community College

Engineering, Associate of Science (A.S.)

Catalog Year 2023 - 2024

I. KALAMAZOO VALLEY COURSES for GENERAL EDUCATION/Michigan Transfer Agreement (MTA) (30 credits minimum) See attached Kalamazoo Valley MTA guide for specific courses from Kalamazoo Valley that will fulfill the MTA requirements				
Kalamazoo Valley Course	WMU (Western Essential Studies) Equivalent	Transfer Credit Hours		
English Composition – ENG 110 or ENG 160, and one of the following COM 113, COM 210, ENG 111, ENG, 112, ENG 127, ENG, 227, ENG 260	IEE 1020, Varies	6		
Humanities - 2 courses from different subject areas	Varies	6		
Mathematics – MATH 160	MATH 1220	5		
Science –CHM 120, PHY 221	CHEM 1100/10(PS), PHYS 2050/60	9		
Social Sciences – (2) ECO 202 and 1 additional non-ECO social science	ECON 2010, varies	6		
TOTAL KALAMAZOO VALLEY CREDIT HOURS		32 CREDIT HOURS		

II. KALAMAZOO VALLEY COURSES – (30 credits)			
Kalamazoo Valley Course	WMU Equivalent	Transfer Credit Hours	
CIS 150	CIS credit	3	
CIS 207 or 209 or216	CS 1110	3	
EDMT 130	EDMM 1420	4	
MATH 162	MATH 1230	5	
MATH 260	MATH 2720	5	
PHY 222	PHYS 2070/80	5	
PSI 100, PSI 101, PSI 102, or PSI 126	PSCI 1000, PSCI 2000, PSCI 2020, or PSCI Credit	3	
WPE	Varies	2	
SECTION II KALAMAZOO VALLEY CREDIT HOURS		30 CREDIT HOURS	
TOTAL KALAMAZOO VALLEY CREDIT HOURS		62 CREDIT HOURS	

III. WMU COURSES REQUIRED FOR PROGRAM DEGREE (82 credits)		
WMU Course	WMU Course Title	WMU Credit Hours
MATH 3740	Differential Equations	4
IEE 2010	Entr. Engineering I	3
IEE 2610	Engineering Statistics	3
ME 2560	Statics	3
IEE 2050	Work Design	4
IEE 2621	Probability For Engineers	3
IEE 2622	Statistical Quality Control	2
IEE 3010	Entrepreneurial Eng. II	3
IEE 3100	Engineering Economy	3
IEE 3160	Report Preparation	3
IEE 3110	Intro to Operations Research	3
IEE 3300	Simulation Modeling Analysis	3
IEE 3420	Ergonomics and Design	3
ECE 2100	Circuit Analysis	4
IEE 4010	Entrepreneurial Engineering III	3
IEE 4160	Operations Control	4
IEE 4190	Senior Design	1
IEE 4190 NP	IEE Senior Design	3
Minor Electives		15
Technical Electives		9
WES Global Perspective		3
WMU Elective Credits to Reach 60		
Varies	Varies	
TOTAL CREDIT HOURS		82 CREDIT HOURS AT WMU

TOTAL CREDITS (I –III)

62 Kalamazoo Valley Credits

82 WMU Credits

144 Total Credits

Minimum credits required for Kalamazoo Valley associate degree: 62 Minimum credits required at WMU: 60 Total minimum required credits: 122

Advising Notes

Kalamazoo Valley Student Development Services 269-488-4040 development@kvcc.edu

WMU Academic Advisor 269-276-3270 <u>kyle.m.manninen@wmich.edu</u>

Program Agreement

This agreement shall commence as of Nov 6, 2023. This program agreement shall abide by all language of the Institutional Agreement between Kalamazoo Valley Community College and Western Michigan University.

[†] Professional level courses that require acceptance into the WMU program

GP WES level 3 courses satisfying Global Perspective

NP WES level 3 courses satisfying National Perspective

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Signatures	
Kalamazoo Valley Community College	Western Michigan University
Dr. Mark Dunneback, Dean of Instruction Business & Technical Careers Kalamazoo Valley Community College	Azim Houshyar, Chair, Industrial & Entrepreneurial Engineering Western Michigan University
Dr. Paige Eagan, Provost & Vice President for Instruction & Student Services Kalamazoo Valley Community College	Steve Butt, Dean, College of Engineering and Applied Sciences Western Michigan University